ABSTRACT

An RNA capable of suppressing the expression of KLF5 gene, which comprises a sequence consisting of 15 to 30 contiguous nucleotides of KLF5 mRNA and a sequence complementary to the sequence, and which has been designed from the nucleotide sequence of Kruppel-like factor 5 (KLF5) cDNA. Specifically, a double-stranded RNA having a strand of a sequence shown in any one of SEQ ID NOS: 2 to 16 and a strand of a sequence complementary to the sequence, in which 2 uridylic acids are added to the 3'-terminus of each of the strands. By transfecting the RNA or a vector for expression of the RNA into cells, the expression of KLF5 gene in the cells can be suppressed. The RNA or a vector for expression of the RNA can be used as a therapeutic agent for cardiovascular disease or cancer.